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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/603,043	06/24/2003	Jason P. McDevitt	KCX-375-CON (16068.1) 1869		
22827	7590 02/27/2006	02/27/2006		EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			GUIDOTTI, LAURA COLE		
			ART UNIT	PAPER NUMBER	
	,		1744	1744	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	. <u> </u>						
Office Action Summary		Application No.	Applicant(s)				
		10/603,043	MCDEVITT ET AL.				
		Examiner	Art Unit				
		Laura C. Guidotti	1744				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)[🗆	Responsive to communication(s) filed on 09 De	ecember 2005.					
-	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)🖂	4)⊠ Claim(s) <u>46-70</u> is/are pending in the application.						
-	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)🖂	5)⊠ Claim(s) <u>46-56</u> is/are allowed.						
6)⊠	6) Claim(s) <u>57-67,69 and 70</u> is/are rejected.						
7)🖾	Claim(s) <u>68</u> is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	election requirement.					
Applicati	on Papers						
9)[	The specification is objected to by the Examiner	r.					
10)⊠ The drawing(s) filed on <u>07 January 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment	Me)						
_	e of References Cited (PTO-892)	4) Interview Summary (	(PTO-413)				
2) 🔲 Notica	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
3) 🔲 Inform Paper	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5)  Notice of Informal Pa	atent Application (PTO-152)				

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#### **DETAILED ACTION**

## Claim Objections

1. Claims 57-70 are objected to because of the following informalities:

Claims 57 and 70 recite the limitation "the z-direction" in Lines 4 and 5 respectively. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 57-59, 61-62, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron, USPN 2,966,691 in view of Ness, USPN 2,041,262.

Cameron discloses the claimed invention including a hollow member (20) having an open end for the insertion of a first finger (Figure 1), the hollow member defining a texturized surface configured to clean teeth (16 or puckering/surface protrusions, Column 4 Lines 40-47), the texturized surface having projections in the z-direction (the surface protrusions and puckering, Column 4 Lines 40-47), the hollow member contains an elastic non-woven comprising an elastic component (24; Column 3 Lines 38-45) and a non-elastic component (paper layers 12 and 14 or inelastic thread 26; Column 3 Lines 13-17, 38-45). The hollow member includes a closed end located opposite the open end (at 28; see Figures). An additive has been applied to the cleaning device that is a dentifrice, toothpaste, and may include gelatin (Column 3 Lines 62-70). Cameron does not include the structure that there is a second hollow member or a connecting portion.

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Ness teaches a cleaning wipe that has two hollow members (8a, 8b) that each has one open end for the insertion of a finger and an opposite closed end (see Figure 1) and there is a connecting portion (8c) for connecting the two hollow members. Because of this design of two hollow members and a connecting portion, the device can clean teeth much quicker because both the inner and outer sides of the teeth are simultaneously cleaned (Page 2 Column 2 Lines 12-17).

It would have been obvious for one of ordinary skill in the art to extend the material of the singular hollow member tooth cleaner of Cameron to further include a second hollow member and connecting portion, as Ness teaches, so that a user can clean their teeth quicker and more efficiently by cleaning two sides of a tooth surface at once.

3. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams, IV, USPN 3,696,821 in view of Mader, USPN 6,065,480.

Adams, IV discloses the claimed invention including a first hollow member (12, there are two separate elements marked "12" in the Figures) having an open end (where finger "15" is inserted) the hollow member having a surface with a texture (16; also a physical surface inherently has a texture, wherein "texture" is defined as "the distinctive physical composition or structure of something, especially with respect to the size, shape, and arrangement of its parts" according to *The American Heritage*® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company), a second hollow member (other portion "12") having an open end (where other finger "15" is inserted), and a connecting portion (11') wherein the

connecting portion comprises dental floss (Column 2 Lines 41-45). Although Adams, IV includes one projection in the z-direction (16), Adams IV does not include plurality of projections in the z-direction.

Mader discloses a device that teaches first and second hollow members having open ends that fit over two users fingers (18a) and (18b) that are connected by dental floss (14). One hollow member has a texturized surface configured to clean the teeth and gums of a user and includes projections in a z-direction (68; Figure 11A).

It would have been obvious for one of ordinary skill in the art to modify a first hollow member of Adams, IV to further include projections in a z-direction such as toothbrush bristles, as Mader teaches, so that while implementing a flossing device, one could also clean the oral cavity.

4. Claims 57-59, 61-66, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams, IV, USPN 3,696,821 in view of McCarver et al., USPN 5,362,306 and further in view of Mader, USPN 6,065,480.

Adams, IV discloses the claimed invention including a first hollow member (12, there are two separate elements marked "12" in the Figures) having an open end (where finger "15" is inserted), the hollow member having a surface with a texture (16; a physical surface of the device inherently has a texture, wherein "texture" is defined as "the distinctive physical composition or structure of something, especially with respect to the size, shape, and arrangement of its parts" according to *The American Heritage*® *Dictionary of the English Language, Fourth Edition Copyright* © 2000 by Houghton *Mifflin Company*) that is *capable* of cleaning teeth and gums, a second hollow member

(other portion "12") having an open end (where other finger "15" is inserted), and a connecting portion (11') wherein the connecting portion comprises dental floss (Column 2 Lines 41-45). Adams, IV does not disclose that at least the first hollow member or the second hollow member contains an elastic nonwoven comprising an elastic component and a non-elastic component.

McCarver et al. discloses a form fitting surgical device for covering an extremity that forms a hollow member (see Figures; Column 3 Lines 12-27) and is made from an elastic nonwoven comprising an elastic component (36) and a non-elastic component (32 or 34). The hollow member includes a first panel (layer 36) attached to a second panel (layer 34), while the second panel comprises a non-elastic material (Column 4 Lines 62-64, as it is made from a "film"). The device is a laminate that is bonded, specifically stretch-bonded (Column 2 Lines 32-41).

It would have been obvious for one of ordinary skill in the art to modify Adams, IV so that both the first and second hollow members of Adams, IV are comprised of an elastic nonwoven comprising an elastic component and a non-elastic component, as McCarver et al. teach, so that the device is form fitting to a finger and it would have been obvious for one of ordinary skill in the art to modify a first hollow member of Adams, IV and McCarver to further include projections in a z-direction such as toothbrush bristles, as Mader teaches, so that while implementing a flossing device, one could also clean the oral cavity.

5. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron, USPN 2,966,691 and Ness, USPN 2,041,262 as applied to claim 57, in view of Reinold, USPN 5,875,513.

Cameron and Ness disclose all elements above, however do not disclose that the texturized surface comprises looped bristles.

Reinold teaches the use of incorporating looped bristles to a finger toothbrush surface in order to beneficially clean teeth (Column 4 Lines 38-54).

It would have been obvious for one of ordinary skill in the art to modify the texturized surface of Cameron and Ness by further adding looped bristles, as Reinold teaches, in order to further increase the cleaning efficacy of the finger toothbrush.

## Allowable Subject Matter

- 6. Claims 46-56 are allowed.
- 7. Claim 68 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art made of record teaches or suggests a plurality of spaced apart microcuts. Also, none of the prior art made of record includes a cleaning device having a first hollow member having an open end for the insertion of a first finger, the hollow member defining a texturized surface, a second hollow member having an open end, at least the first hollow member or second hollow member containing an elastic nonwoven comprising an elastic component and a non-elastic component, further

wherein the texturized surface comprises a point unbonded material, the point unbonded material comprising a plurality of raised tufts surrounded by bonded regions.

### Applicants Arguments

9. In the response filed 09 December 2005, the Applicant contends that:

A. The modification of Hahn finds no motivation in either cited reference and is improper, Applicant's submit that independent claim 57 is patentable over Hahn, either alone or in combination with Ness.

B. Neither Adams nor McCarver include a texturized surface having projections in the Z-direction.

C. Adams, IV describes thimbles that are preferably rigid and actually teaches away from the use of a flexible or elastic material, such as an elastic nonwoven (McCarver).

#### Response to Arguments

- 10. Applicant's argument A with respect to Hahn in combination with Ness has been considered but is most in view of the new ground(s) of rejection.
- 11. Applicant's arguments B-C filed 09 December 2005 have been fully considered but they are not persuasive.
- B. It is noted that Adams, IV does include a single projection on the hollow members (16). However, in further consideration of the dental flossing prosthesis of Mader, it would have been obvious for one of ordinary skill in the art to modify a first hollow member of Adams, IV to further include projections in a z-direction such as

toothbrush bristles, as Mader teaches, so that while implementing a flossing device, one could also clean the oral cavity.

C. While Adams, IV does in fact state that the thimbles are *preferably* rigid,
Adams, IV also admits that the thimbles may be suitable as semi-rigid (Column 2 Lines
13-16). McCarver teaches an elastic nonwoven material that is designed so that a
hollow or tubular material having a liquid impervious film may be form fitting around a
human member. It would have been obvious for one of ordinary skill in the art to modify
Adams, IV so that both the first and second hollow members of Adams, IV are
comprised of an elastic nonwoven comprising an elastic component and a non-elastic
component, as McCarver et al. teach, so that the device is form fitting to a finger.

#### Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCG LCG

> RICHARD CRISPINO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700